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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,878	10/16/2003	Yu-Cheng Hsu	TUC920030050US1	7388
45216	7590	02/18/2009		
Kunzler & McKenzie 8 EAST BROADWAY SUITE 600 SALT LAKE CITY, UT 84111			EXAMINER JOHNSON, CARLTON	
			ART UNIT 2436	PAPER NUMBER
			MAIL DATE 02/18/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

<b>Application No.</b> 10/686,878	<b>Applicant(s)</b> HSU ET AL.
<b>Examiner</b> CARLTON V. JOHNSON	<b>Art Unit</b> 2436

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 03 February 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.  
NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.

6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1, 3-8, 10-22, 24-30.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see Continuation Sheet.

12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_

13. ☐ Other: \_\_\_\_\_.

/Nasser G Moazzami/  
Supervisory Patent Examiner, Art Unit 2436

/Carlton V. Johnson/  
Examiner, Art Unit 2436

## Response to Arguments

## Examiner Position:

The arguments were not persuasive in overcoming the currently rejected claims.

In the response to the Non-Final rejection dated 8-26-2008, Applicant mentioned an IBM document dated 22 October 2002 that invalids the effective date of the Moiroux prior art reference. At that time, the Examiner saw no indication of an IBM document added to the prosecution list of documents. The Moiroux prior art is still a valid prior art reference and the grounds of rejection including the Moiroux prior art was maintained.

In the advisory action based on the Final Action dated 12-3-2008, Applicant indicated 4 Exhibits (Exhibits A, B, C and D) to be used to invalid the Moiroux prior art reference. The indicated Exhibit C (mentioned in the declaration of Brian Kunzler dated 2-3-2009) does not appear to be included in the prosecution list of documents.

The indicated Exhibit B document titled "Disclosure TUC8-2002-0172" states a Submitted Date of 10/22/2002 and a Final Deadline date of 7-18-2003. This document is ineffective since there is no disclosure what occurred between the submitted date and final deadline date. In addition, the Exhibit B document states on page 2 in the Patent Value Tool section number 2 that no prototype has been developed.

There is insufficient information provided to properly evaluate the Exhibits.

Applicant indicated in previous remarks a special software instruction that can be used to initiate a reboot sequence without requiring that power be cycled or that memory be erased. It appears the Applicant should have been aware during the setup of this particular application of this fact and should have mentioned in Applicant's application such a specific command. It appears that the Applicant should have realized during application setup that it was obvious that a specific command was needed in order not to erase volatile memory during a reboot procedure and should have indicated the same in the application for this particular invention. One of the indicated references does disclose a specific reset signal and a special sequence utilized not to reset memory. The setting of this particular signal is continued until the reset is completed.

The Examiner is unclear why a reboot procedure is necessary in order to complete the indicated steps that Applicant's invention requires. Applicant's invention starts operating at the initiation of an interrupt/exception (i.e. possibly detected error) by a computer system. Processing this interrupt/exception, Applicant's invention loads a special program (a data save kernel) which saves the contents of volatile memory. Now, after the data save operation completion, the computer system can continue processing operations which may result in a system reboot. Applicant's invention appears to be the termination of active processes and the data save of volatile memory using the data save kernel software.

In order to reiterate Examiner's position, previous responses to remarks have been included:

Tallam discloses a computer boot loader that load an OS under normal procedures and load a recovery OS (data save, reduced kernel) under system crash conditions. (see Tallam col. 5, lines 5-10: boot loader (boot control module) for loading the OS; col. 3, lines 48-49: col. 4, lines 13-17: OS rebooted; col. 3, lines 33-36: kernel reduced to only code which is necessary to implement required functions)

Moiroux discloses the save of system data in the event of a system crash or a system shutdown due to an incorrect condition. (see Moiroux col. 1, lines 55-60: save system memory context to non-volatile storage; indication system shutdown correctly or incorrectly (crash, abnormal condition))

Applicant's principal argument is the capability to reboot a computer system and place a special data save kernel (core executable) into execution at reboot completion and save the contents of volatile memory. This particular sequence of events raises an enablement issue and requires a USC 112 rejection. Applicant uses the term "reboot" multiple times within the specification with no definition of the term. Therefore, the generic definition of this particular term, "reboot", will be utilized.

The reboot of a computer system can be performed utilizing a hard boot (with power-off and power-on sequence) or a soft boot (with no power-off and power-on sequence). Applicant's specification does not disclose what type of reboot is implemented as part of the claimed invention. After a review of definitions for the term "reboot" it was found that a power-off and power-on sequence in most situations can be part of a reboot procedure. If a reboot procedure includes a power-off and power-on sequence, then volatile memory is erased and there is no recoverable information for the data save kernel (executable) to save. Rebooting the processor clears the currently executing instruction sequence from the designated executing program (application executing under the control of an operational (executing) OS). And, the reboot procedure reloads a new instruction sequence (i.e. the data save kernel) for the processor to initiate executing instructions.

In addition, as part of the reboot procedure, volatile memory is erased when power is no longer supplied (during a power-off power-on sequence, if one is completed as part of the reboot procedure). This leads to the enablement problem with Applicant's invention. The invention cannot be implemented as claimed. If applicant feels that there is no enablement problem, please indicate the citations that prove a power-off and power-on sequence is definitely not completed as part of the reboot procedure for confirmation.

Prior art references disclose the save of volatile memory in the event of an abnormal condition (i.e. power failure, system crash). Prior art references disclose the reboot of a computer system after an abnormal condition (system crash).

## Reboot Definitions:

With power-off and power-on sequence:

(<http://www.thefreedictionary.com/reboot>)

(<http://www.webopedia.com/TERM/R/reboot.html>)

(<http://www.allwords.com/word-reboot.html>)

([http://search.smb.techtarget.com/sDefinition/0\\_sid44\\_gc947403.00.html](http://search.smb.techtarget.com/sDefinition/0_sid44_gc947403.00.html))

(<http://www.yourdictionary.com/ahd/r/r0076750.html>)

Without no power-off and power-on sequence:

(<http://www.scala.com/definition/reboot.html>)

The majority or almost all definitions of the term "reboot" indicate a power-off and power-on sequence as a possible step in the reboot procedure. The general consensus appears to be that a reboot can involve a power-off and power-on sequence. This sequence is not excluded by the specification and the original claims. Therefore, this disclosure renders the term "reboot" in the specification indefinite. If applicant feels that there is no indefinite problem with term "reboot", please indicate the citations that state a definition for the term "reboot" for confirmation.

The 112 first paragraph rejections for Claims 1, 10, 13, 17, 24, 28 will be maintained. For Claims 1, 10, 13, 17, 24, 28, there is no disclosure for the amended claim limitation: "wherein the reboot occurs without a loss of data within the volatile memory" in the specification and the original claims. The data save operation is performed to save and prevent a loss of data in volatile memory. There is no disclosure that the reboot procedure must be completed without a loss of data in volatile memory.

The previous rejection for Claims 1, 10, 13, 17, 24, 28 will be maintained. The reboot of a computer system can be performed utilizing a hard boot (with a power-off and power-on sequence) or a soft boot (without a power-off and power-on sequence). Applicant's specification does not disclose what type of reboot is implemented for the claimed invention. After a review of definitions for the term "reboot", it was found that a power-off and power-on sequence can be performed as part of a reboot procedure. If a reboot procedure includes a power-off and power-on sequence, then volatile memory is erased and there is no recoverable information for the data save kernel to save for placement onto non-volatile storage.

The 112 first paragraph rejections for Claims 1, 10, 13, 17, 24, 28 will be maintained. The reboot of a computer system can be performed utilizing a hard boot (with a power-off and power-on sequence) or a soft boot (with no power-off and power-on sequence). Applicant's specification or original claims do not disclose what type of reboot or definition of the term reboot implemented for the claimed invention.